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Current Economic Analysis I-24

Industrial Fishery Products

Market Review and Outlook

Economic and Marketing Research Division
Washington, D.C.

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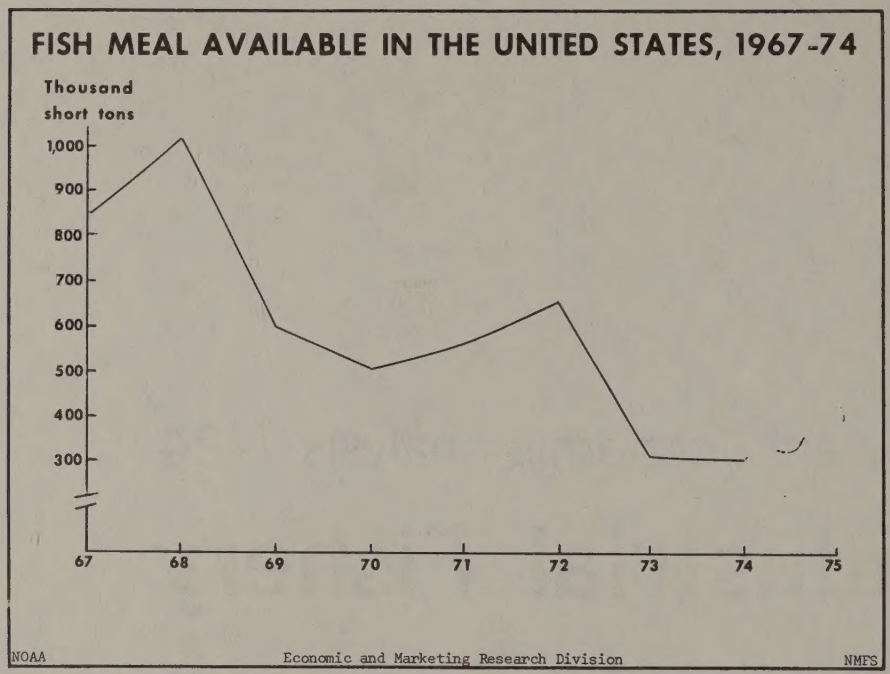

Figure 1

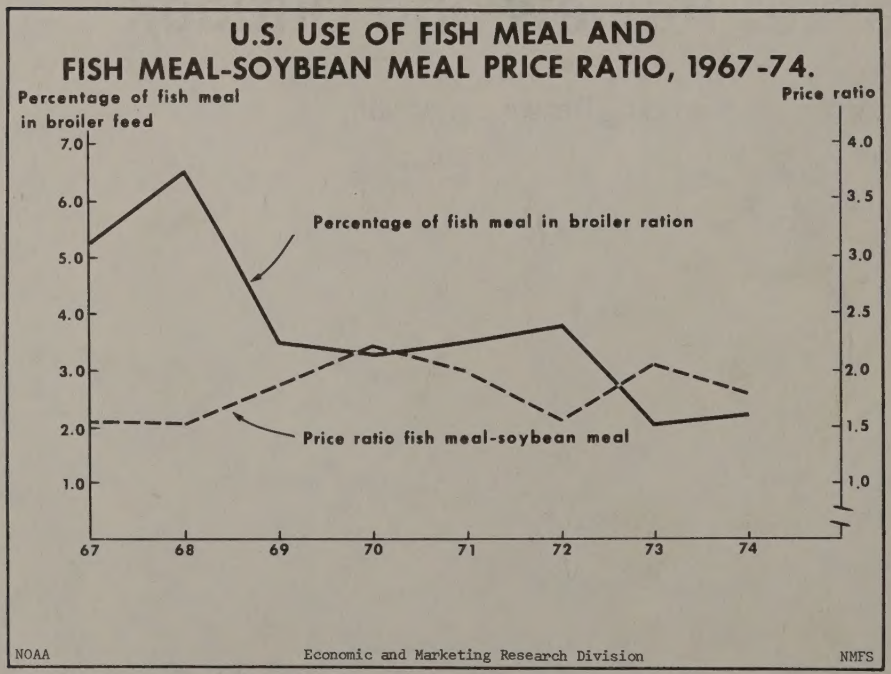

Figure 2

INDUSTRIAL FISHERY PRODUCTS MARKET REVIEW AND OUTLOOK

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SUMMARY

FISH MEAL

The availability of fish meal in January - May 1975 almost doubled because of high imports.

Domestic production down in the first 5 months of 1975.

Imports up more than threefold and exports down.

Production of major exporting countries in January-March up 23 percent.

Export of FEO Countries 1/ up 82 percent in the first 3 months of 1975.

Domestic utilization improved, but demand still sluggish.

Broiler placements in January-May 1975 down 4 percent from a year ago, but broiler prices gained.

Prices of fish meal declined during January-May 1975.

Outlook: A notable improvement in the world and U.S. supply situation. Domestic production up for the rest of 1975. Total 1975 production likely slightly lower than a year ago. U.S. imports will increase' exports will subside. Domestic demand likely to increase.

FISH SOLUBLES

Supplies in January-May about the same as a year ago.

Prices declined.

Outlook for the rest of 1975: production up slightly, stronger demand.

FISH OIL

Domestic fish oil production in January-May up from last year.

U.S. use down, but exports above a year ago.

Prices continued to weaken.

Outlook: Production above a year ago; domestic use and exports likely to decline and prices continue to weaken.

1/ Fishmeal Exporters Organization: member countries are Angola, Chile, Iceland, Norway, Peru and South Africa.

FISH MEAL

REVIEW

Supplies

Available supplies of fish meal in the United States increased considerably during the first 5 months of 1975. Sharply increased imports and reduced exports were responsible for the higher supplies, whereas domestic production was slightly less than a year ago. Despite the improvement in availability, supplies were still relatively low in comparison to the 1970-74 average for the same period. The new supplies of fish meal in the United States (domestic production and imports minus exports) in January-May were as follows:

	Quantity	Comparison to 1970-74 average
January-May	Thousand tons 2/	Percent
1970-74 average	143.5	100
1974	46.3	32
1975	75.8	53

The increase in United States supplies was attributed to increased imports due to higher fish meal production in Peru and Chile. The January-May supplies of fish meal in the United States probably would have been considerably higher, were it not for the sluggish domestic demand that apparently discouraged imports.

Fish Meal Production

Domestic production of fish meal in January-May 1975 was down 6 percent from a year earlier to about 59,600 tons (table 1). The major decline was in the production of tuna/mackerel meal and menhaden meal (table 2). An increase in the production of anchovy meal was not large enough to offset the decline in the total production.

The production of menhaden meal in January-May 1975 was 28,400 tons, down 9 percent from a year ago. The menhaden fishing season began on the Gulf on April 21. Eleven fish meal reduction plants, 1 more than a year ago, and 78 vessels, 7

2/ In general, domestic figures are expressed in short tons and foreign figures in metric tons. Short tons are used in this report unless otherwise specified. To convert metric tons to short tons, multiply by 1.1023.

Table 1.--Supplies 1/, production, and imports of fish meal in the United States, by month, 1973-75 2/

Month	Supplies			Production			Imports		
	1973	1974	1975 3/	1973	1974	1975 3/	1973	1974	1975
	Thousand short tons								
January	10.3	6.8	8.2	3.0	5.9	6.5	7.3	0.9	1.7
February	5.1	6.9	5.8	3.5	5.9	5.1	1.6	1.0	.7
March	5.4	8.0	6.8	5.0	6.5	5.3	0.4	1.5	1.5
April	18.9	15.4	27.3	12.6	13.3	10.2	6.3	2.1	17.1
May	26.6	33.9	34.9	24.2	31.8	32.5	2.4	2.1	2.4
June	43.9	54.4		38.7	52.9		5.2	1.5	
July	68.3	64.1		56.8	61.4		11.5	2.7	
August	72.1	54.8		51.2	49.7		20.9	5.1	
September	40.5	47.2		35.1	25.4		5.3	21.8	
October	26.1	21.6		21.1	13.7		5.0	7.9	
November	15.5	32.7		14.2	14.2		1.4	18.5	
December	13.8	14.0		13.8	10.7		1.2	3.3	
Total 4/	346.4	359.8		279.1	291.5		68.5	68.3	

1/ Production plus imports; exports not deducted.
2/ Excludes meal made from shellfish.
3/ Preliminary.
4/ Figures may not add to total because of rounding.

Table 2.--U.S. fish meal production by raw material source, 1974-75

Month	Source				Total 2/
	Menhaden 1/	Anchovy	Tuna and mackerel	Unclassified	
	Thousand short tons				
1974					
January	-	1.4	3.0	1.5	5.9
February	-	2.0	2.5	1.3	5.9
March	-	0.6	4.5	1.4	6.5
April	5.9	1.4	4.4	1.6	13.3
May	25.3	2.8	4.1	2.4	34.6
Total January-May 2/	31.2	8.2	18.5	8.2	66.1
Total 1974	203.9	14.1	48.2	25.3	291.5
1975					
January	3/	3.0	2.2	1.3	6.5
February	-	1.8	2.2	1.0	5.1
March	-	0.8	3.5	1.0	5.3
April	3.1	3.3	2.5	1.3	10.2
May	25.3	1.3	3.9	2.0	32.5
Total January-May 2/	28.4	10.2	14.3	6.6	59.6

1/ May include small quantities made from other species.
2/ Figures may not add to total because of rounding.
3/ Included with unclassified.
Note: Data for 1975 subject to revision. Data excludes meal made from shellfish.

more than last year, are operating. Heavy winds hampered the fishing along the entire Gulf coast, and the catch for January-May 1975 was 195 million pounds, down 25 percent from a year earlier.

About 65 vessels and 10 plants are operating along the Atlantic coast, same as last year. The landings in January-May were 53.8 million pounds, up 45 percent from a year earlier.

The total menhaden catch for the Atlantic and Gulf coasts for January-May 1975 was 248.8 million pounds compared with 295.8 million pounds a year ago.

Domestic production of tuna and mackerel meal in January-May 1975 declined in relation to 1974. About 12,400 tons of meal was produced, compared with 18,500 tons a year ago. A slowdown in canned tuna production, caused by heavy inventories, reduced the amount of cannery scrap used for tuna meal.

The production of anchovy meal in January-May 1975 was 10,200 tons, compared with 5,500 tons a year ago. Although total anchovy landings for the 1974-75 season were 116,600 tons--down from a year before, landings for the January-May 15 period--66,000 tons--were about 50 percent higher than last year.

Table 3.--U.S. imports of fish meal by country or origin, 1974-75

Time period	Country of origin				Total 1/
	Canada	Peru	Norway	Other	
	Thousand short tons				
1974					
January	0.9	-	-	-	10.9
February	1.0	-	-	-	1.0
March	1.5	-	-	-	1.5
April	2.0	-	-	0.1	2.1
May	2.0	-	-	0.1	2.1
Total 1/	7.4	-	-	0.2	7.6
1975					
Janaury	1.6	-	-	0.1	1.7
February	0.7	-	-	-	0.7
March	1.5	-	-	-	1.5
April	2.9	9.2	-	2/5.0	17.1
May	2.4	-	-	-	2.4
Total 1/	9.1	9.2	-	5.1	23.4

1/ Figures may not add to total because of rounding.
2/ Chilean import.

Imports and Exports

U.S. imports of fish meal increased notably in April and continued high in May (table 1). Lower prices of fish meal and a partial recovery of Peruvian and Chilean production were the main reasons for the increased imports. About 23,400 tons were imported in January-May 1975 compared with 7,500 tons a year ago. Peru and Canada were the major suppliers, each providing 39 percent of total United States imports. Imports from Chile were 21 percent of total (table 3).

U.S. exports of fish meal in January-May were only 7,200 tons compared with 24,700 tons a year before (table 4). The decline in exports was due to increased availability of fish meal from Peru and Chile and higher prices in the United States than in Europe.

Table 4.--U.S. exports of fish meal, by month, 1973-75

Month	1973	1974	1975
	Thousand short tons		
January	3.0	8.9	2.0
February	1.6	8.8	3.4
March	2.6	1.1	0.9
April	3.0	3.9	0.6
May	.5	1.9	0.3
June	3.2	3.3	
July	2.4	7.3	
August	1.1	8.9	
September	.8	8.0	
October	3.5	1.7	
November	3.7	.6	
December	11.3	1.0	
Total 1/	36.7	55.5	

1/ Figures may not add to total because of rounding.

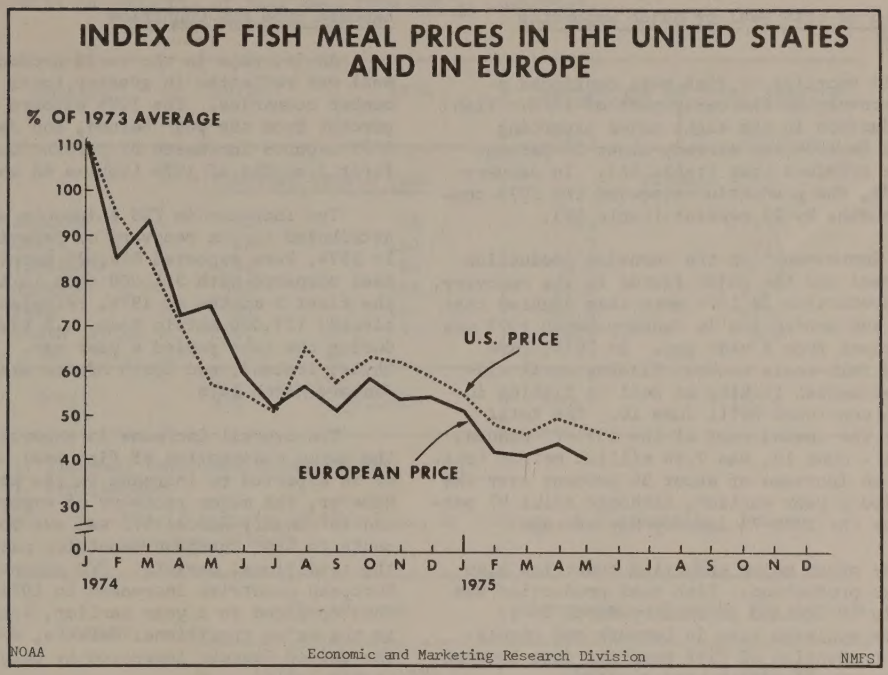

Figure 3

Table 5A.--Production of fish meal in eight major exporting countries, January-December, 1973-74

Country	1973	1974	Percentage of total production	
			1973	1974
	Thousand metric tons		Percent	
Angola	93	63	5.9	2.9
Canada	49	1/ 52	3.1	2.4
Chile	56	144	3.5	6.6
Denmark 1/	244	339	15.3	15.6
Iceland	99	101	6.2	4.7
Norway	354	320	22.3	14.8
Peru	423	2/898	26.6	41.4
South Africa	272	251	17.1	11.6
Total	1590	2/ 2168	100.0	100.0

1/ Estimated.
2/ Preliminary.

Production of Fish Meal by Major Exporting Countries

World supplies of fish meal continued a strong recovery in the early part of 1975. Fish meal production in the eight major exporting countries in 1974 was already about 36 percent above the previous year (table 5A). In January-March 1975, the production exceeded the 1974 comparable months by 23 percent (table 5B).

The improvement in the Peruvian production of fish meal was the major factor in the recovery. Peru's production in 1974 more than doubled that in 1973, and production in January-March 1975 was up 74 percent from a year ago. In 1975, Peru continued full-scale anchovy fishing until mid-May; experimental fishing as well as fishing in the South continued until June 10. The total catch for the second part of the 1974-75 season, January 1 - June 10, was 2.95 million metric tons. This was an increase of about 34 percent over the same period a year earlier, although still 47 percent below the 1968-72 January-May average.

Three other major exporting countries also had higher production. Fish meal production was up sharply in Iceland in January-March 1975. Gains were achieved also in Denmark and Angola. Canada's production of fish meal was down because production of groundfish meal declined.

Exports From FEO Countries

An increase in the world production of fish meal was reflected in greater total exports of FEO member countries. The 1974 exports were up 24 percent from the year before, and January-March 1975 exports increased 82 percent compared to the first 3 months of 1974 (tables 6A and 6B).

The increase in FEO shipments was primarily attributed to the recovery of Peruvian exports. In 1974, Peru exported 632,000 metric tons of fish meal compared with 351,000 tons in 1973. During the first 3 months of 1975, Peruvian exports were already 127,000 metric tons, 4.5 times the exports during the same period a year ago. Exports from Chile, Iceland, and South Africa also increased in January-March 1975.

The overall increase in exports suggests that the world consumption of fish meal has increased or is expected to increase in the near future. However, the major recovery of exports in 1974 and in January-March 1975 was due to heavy shipments to East European countries rather than to the traditional markets. FEO exports to East European countries increased in 1974 by 86 percent compared to a year earlier, whereas exports to the major traditional markets, West Germany and the United States, increased by only 36 percent (table 7A).

Nevertheless, the major market for FEO fish meal in January-March 1975 was West Germany, which imported about 43,000 metric tons of fish meal from FEO countries, slightly less than a year ago. West Germany's total imports of fish meal in January-March 1975 were, however, about 8 percent higher than a year ago.

Table 5B.--Production of fish meal in eight major exporting countries, January-March, 1974-75

Country	1974	1975	Percentage of total production	
			1974	1975
	Thousand metric tons		Percent	
Angola	19.2	21.6	3.7	3.3
Canada	7.5	2.4	1.4	0.4
Chile	33.4	26.3	6.4	4.1
Denmark 1/	54.4	64.6	10.4	10.0
Iceland	66.1	82.0	12.7	12.7
Norway	64.0	61.0	12.2	9.4
Peru	185.8	2/ 324.5	35.6	50.2
South Africa	91.8	64.3	17.6	9.9
Total	522.2	646.7	100.0	100.0

1/ Estimated.
2/ Preliminary.

Table 6A.--Exports of fish meal from FEO 1/ countries, January-December 1973-74

Country	1973	1974	Percentage of total exports	
			1973	1974
	Thousand metric tons		Percent	
Angola	92	58	9.3	4.7
Chile	26	112	2.7	9.1
Iceland	92	84	9.3	6.9
Norway	325	265	33.0	21.7
Peru	351	2/ 632	35.6	51.6
South Africa	100	73	10.1	6.0
Total	986	2/1,224	100.0	100.0

1/ Fishmeal Exporters Organization.
2/ Preliminary.

Table 7A--FEO 1/ exports of fish meal, by country of destination, January-December 1973-74

Country	FEO exports		Percentage of total FEO exports	
	1973	1974 2/	1973	1974 2/
	Thousand metric tons		Percent	
Belg/Holland	66.2	71.1	6.7	5.8
France	20.8	23.2	2.1	1.9
Germany, West	211.3	284.0	21.4	23.2
Italy	38.1	43.5	3.9	3.5
Portugal	15.5	16.0	1.6	1.3
Spain	26.0	40.0	2.6	3.3
United Kingdom	138.0	105.0	14.0	8.6
East European Countries	204.0	379.8	20.7	31.0
Scandinavian Countries 3/	95.0	51.0	9.6	4.2
United States 4/	22.0	33.6	2.2	2.7
Latin American Countries 5/	33.5	50.5	3.4	4.1
Japan	54.0	19.4	5.5	1.6
Australia	7.0	17.2	0.7	1.4
Other	54.6	90.0	5.5	7.4
Total	986.0	1,224.3	100.0	100.0

1/ Fishmeal Exporters Organization.
2/ Preliminary.
3/ Denmark, Finland and Sweden.
4/ Based on export figures reported by FEO countries.
5/ Includes Cuba.

Table 6B.--Exports of fish meal from FEO 1/ countries, January-March, 1974-75

Country	1974	1975	Percentage of total exports	
			1974	1975
	-Thousand metric tons -		- - - - - Percent - - - - -	
Angola	17.8	15.6	10.9	5.3
Chile	19.6	30.7	12.0	10.4
Iceland	15.9	30.7	9.8	10.4
Norway	66.5	47.8	40.8	16.1
Peru	28.3	2/ 127.3	17.4	42.9
South Africa	14.8	44.5	9.1	15.0
Total	162.9	2/ 296.6	100.0	100.0

1/ Fishmeal Exporters Organization.
2/ Preliminary.

Table 7B.--FEO 1/ exports of fish meal, by country of destination, January-March, 1974-75

Country	FEO exports		Percentage of total FEO exports	
	1974	1975 2/	1974	1975 2/
	-Thousand metric tons-		- - - Percent - - -	
Belg/Holland	5.0	6.7	3.1	2.3
France	4.4	9.6	2.7	3.2
Germany, West	44.0	42.9	27.0	14.5
Italy	3.6	14.9	2.2	5.0
Portugal	2.6	8.8	1.6	3.0
Spain	4.2	16.5	2.6	5.6
United Kingdom	24.9	20.7	15.3	7.0
East European Countries	39.1	81.7	24.0	27.5
Scandinavian Countries	18.3	15.5	11.2	5.2
United States 4/	-	4.5	-	1.5
Latin American Countries 5/	-	19.6	-	6.6
Japan	5.8	18.7	3.6	6.3
Australia	1.3	1.4	0.8	0.5
Other	9.7	35.1	5.9	11.8
Total	162.9	296.6	100.0	100.0

1/ Fishmeal Exporters Organization.
2/ Preliminary.
3/ Denmark, Finland and Sweden.
4/ Based on export figures reported by FEO countries.
5/ Includes Cuba.

FEO Stocks

Despite an increase in the world consumption of fish meal, FEO stocks of fish meal increased from year-ago levels. Stocks on January 1, 1975, were 451,000 metric tons, more than twice the quantity held a year before (table 8A). Stocks declined slightly during the first 2 months of 1975, before full-scale fishing began March 10 in Peru. Fish meal stocks in Peru were the major reason for the higher FEO stocks. Peru held about 382,700 metric tons of fish meal at the beginning of April 1975--more than twice the amount a year earlier. On April 1, 1975, the other FEO member countries, with the exception of South Africa, also held higher stocks than a year before. Peruvian stocks on the beginning of June 1975 were estimated about 500,000 metric tons compared with 473,800 tons a year ago. These relatively low stocks in view of improved production further indicate that the world consumption of fish meal is recovering.

Table 8A.--FEO 1/fish meal stocks held January 1, 1973, 1974 and 1975

Country	1973	1974	1975	Percengage of FEO total stocks		
				1973	1974	1975
	Thousand metric tons			Percent		
Angola	20	14	13	10.8	7.3	2.9
Chile	17	15	34	9.2	7.8	7.5
Iceland	1	3	15	0.5	1.5	3.3
Norway	77	85	124	41.6	44.3	27.5
Peru	60	52	2/ 206	32.4	27.1	45.7
South Africa	11	23	59	5.5	12.0	13.1
Total	186	192	2/ 451	100.0	100.0	100.0

1/ Fishmeal Exporters Organization.
2/ Preliminary.

Table 8B.--FEO 1/ fish meal stocks held April 1, 1974 and 1975

Country	1974	1975	Percentage of FEO total stocks	
			1974	1975
	Thousand metric tons		Percent	
Angola	14.3	18.3	3.5	2.8
Chile	22.3	29.0	5.4	4.4
Iceland	52.0	53.0	12.7	8.0
Norway	79.0	133.0	19.3	20.2
Peru	181.0	2/ 382.7	44.1	58.1
South Africa	61.6	42.7	15.0	6.5
Total	410.2	2/ 658.7	100.0	100.0

1/ Fishmeal Exporter Organization.
2/ Preliminary.

Demand

Stimulated by attractive prices of fish meal in comparison with other high-protein feed ingredients, world consumption of fish meal recovered considerably during January-May 1975. Socialist countries appeared to have increased their usage in 1974 and 1975. The decline in the consumption (disappearance) of soybean meal in Western Europe and in the United States was partially offset by greater consumption of fish meal during the latter part of 1974 and the early months of 1975. Prices of fish meal were attractive compared to soybean meal in these periods.

Broiler Placements

Despite lower prices of fish meal, the cost of producing broilers in the United States continued high in 1975 and led to fewer broiler placements in January-May 1975 than a year ago. About 1.28 billion broiler chicks were placed on farms in the leading broiler-producing States during the first 5 months of 1975--about 6 percent less than a year earlier and about 4 percent lower than the placements in January-May 1973 (table 9).

Prices paid for broilers at the farm in the first 5 months of 1975 averaged 24.1 cents per pound, about 2.4 cents per pound more than a year ago. The higher prices of broilers were mainly a result of reduced supplies. According to USDA, prices received for broilers during the first quarter of 1975 have covered most production costs for this period 3/. However, profits were not enough to stimulate increased production.

Soybean Meal Prices

Prices of soybean meal during the first 3 months of 1975 continued to decline, but strengthened temporarily in April (table 10). The January average price for 50 percent soybean meal at Decautr, Ill., was $137.90 per ton. The May average was $129 per ton, about $9 above the average price in May, but $24 lower than the 1974 annual average. In June, the average price for 50 percent soybean meal increased to $139.75 per ton in response to increased expectations of USSR purchases. The average ratio between the prices of Peruvian fish meal and soybean meal declined during January-June, 1975 (table 11). The lower

3/ USDA, Poultry and Egg Situation June 1975, p. 5.

Table 9.--Broiler chick placements in 21 States, and average broiler price at the farm by month

Month	1973		1974		1975	
	Chicks placed	Broiler price	Chicks placed	Broiler price	Chicks placed	Broiler price
	Million	Cents/lb.	Million	Cents/lb.	Million	Cents/lb.
January	226.2	17.2	238.5	21.5	219.4	24.2
February	229.3	19.8	240.7	23.4	223.1	24.6
March	306.7	23.2	316.6	22.2	295.0	23.7
April	253.6	25.2	252.0	21.0	240.6	23.4
May	314.6	23.8	314.3	20.5	300.3	24.6
June	247.6	24.3	244.3	19.0		
July	220.1	27.6	215.4	20.5		
August	288.9	36.5	262.3	20.9		
September	217.0	29.7	197.5	22.8		
October	217.4	23.7	188.8	22.8		
November	278.1	19.4	248.1	24.2		
December	230.2	20.0	217.8	21.9		
Total placements and average price	3,029.7	24.2	2,936.3	21.7		

1/ Figures may not add to total because of rounding.

Sources: Delmarva Broiler Chick Report, U.S. Department of Agriculture, Statistical Reporting Service, and Poultry and Egg Situation, U.S. Department of Agriculture, Economic Research Service.

ratio indicates that the competitive position of fish meal as a source of protein improved.

Prices of Fish Meal

Fish meal prices steadily declined in 1974 and the first 5 months of 1975 from the very high prices a year earlier (fig. 5). The average price of menhaden fish meal was $263.12 per ton, f.o.b. Gulf and East coast plants in January 1975, $12.65 per ton less than the 1974 annual average price. Prices declined to an average of $226.87 per ton in May (table 12). This decline occurred along with the decline of prices of Peruvian fish meal in the United States. These prices were close to the prices of menhaden meal (table 13).

Prices of tuna and mackerel meal declined less than the prices of menhaden meal and Peruvian meal (table 14). The price of tuna and mackerel meal was quoted at Los Angeles at $240 per ton in January. Tuna meal was quoted at $226.50 in May--about the same as the price quotation for menhaden meal in New York City. Traditionally, the prices of menhaden meal are somewhat higher than prices of tuna meal and mixed tuna - mackerel meal.

Table10.--Average monthly prices of soybean meal 1/ at Decatur, Ill.,

Month	1973	1974	1975
	Dollars per short ton		
January	210.40	192.40	137.90
February	240.00	175.25	126.90
March	224.90	160.40	126.90
April	228.40	130.40	131.80
May	346.60	120.00	129.00
June	450.00	110.50	139.75
July	346.00	147.10	
August	316.25	165.90	
September	231.90	147.25	
October	175.60	179.80	
November	179.00	154.00	
December	223.00	155.80	
Average 2/	231.90	153.50	

1/ 50 percent protein, bulk.
2/ Average weighted by monthly production of soybean meal and cake.

Source: Feed Market News, U.S. Department of Agriculture, Consumer and Marketing Service, Grain Division.

Table11.--Ratio of Peruvian fish meal price 1/ to soybean meal price 2/, by month, 1973-75

Month	1973	1974	1975
	Price ratio		
January	1.65	3/ 2.77	1.90
February	1.69	3/ 2.58	1.83
March	1.83	3/ 2.52	1.74
April	1.77	3/ 2.62	1.82
May	1.38	3/ 2.28	1.73
June	-	3/ 2.38	1.55
July	1.43	3/ 1.66	
August	1.54	3/ 1.89	
September	3/ 1.96	3/ 1.87	
October	3/ 2.42	1.67	
November	3/ 2.43	1.93	
December	3/ 2.41	1.79	
Average	N.A.	N.A.	

1/ 65 percent protein, f.o.b. East Coast ports, as quoted at New York City.
2/ 50 percent protein, bulk, wholesale at Decatur, Ill.
3/ Ratio of menhaden meal price to soybean meal price.

Table12.--Average monthly price of menhaden meal 1/ f.o.b. East Coast and Gulf plants, 1973-75

Month	1973	1974	1975
	Dollars per short ton		
January	2/ 389.50	2/ 532.50	263.12
February	2/ 410.10	2/ 452.50	231.25
March	2/ 424.10	403.75	220.50
April	2/ 409.50	342.00	238.75
May	457.50	273.10	226.87
June	508.10	263.00	218.75
July	497.10	243.50	
August	473.90	3/ 314.35	
September	456.60	275.50	
October	425.00	301.25	
November	2/ 436.25	297.50	
December	2/ 537.50	281.00	
Average 4/	478.58	275.77	

1/ 60 Percent protein, bulk, as quoted by brokers at New York City.
2/ Nominal price.
3/ Asking price.
4/ Average weighted by monthly production of menhaden meal.

Table 13.--Average monthly prices of Peruvian fish meal 1/ f.o.b. East Coast Ports, 1973-75

Month	1973	1974	1975
	- - - Dollars per short ton - - -		
January	2/ 347.25	3/ -	262.50
February	2/ 406.25	3/ -	231.90
March	2/ 411.90	3/ -	220.50
April	2/ 405.00	3/ -	240.00
May	2/ 480.00	3/ -	223.12
June	3/ -	3/ -	216.25
July	493.75	3/ -	
August	487.50	3/ -	
September	3/ -	3/ -	
October	3/ -	3/ -	
November	3/ -	297.50	
December	3/ -	278.50	
Average 4/	451.70	-	

1/ 65 Percent protein, bulk, f.o.b, East Coast ports.
2/ Nominal price.
3/ Supplies exhausted, no quotes.
4/ Average weighted by monthly imports of Peruvian fish meal.

Table 14.--Average monthly prices of tuna and mackerel meal 1/, at Los Angeles, 1973-75

Month	1973	1974	1975
	- - - -Dollars per short ton- - - -		
January	187.00	453.00	240.00
February	2/	390.00	226.87
March	360.00	301.88	210.00
April	390.00	274.50	5/ 225.00
May	393.80	281.25	5/ 226.50
June	468.75	242.25	5/ 231.06
July	474.00	207.90	
August	480.00	3/ 296.25	
September	408.75	222.00	
October	309.00	240.00	
November	345.00	240.00	
December	455.62	240.00	
Average 4/	396.35	271.78	

1/ 60 percent protein, bulk as quoted by brokers at Los Angeles.
2/ No quotes.
3/ Asking price.
4/ Average weighted by monthly production.
5/ Tuna only.

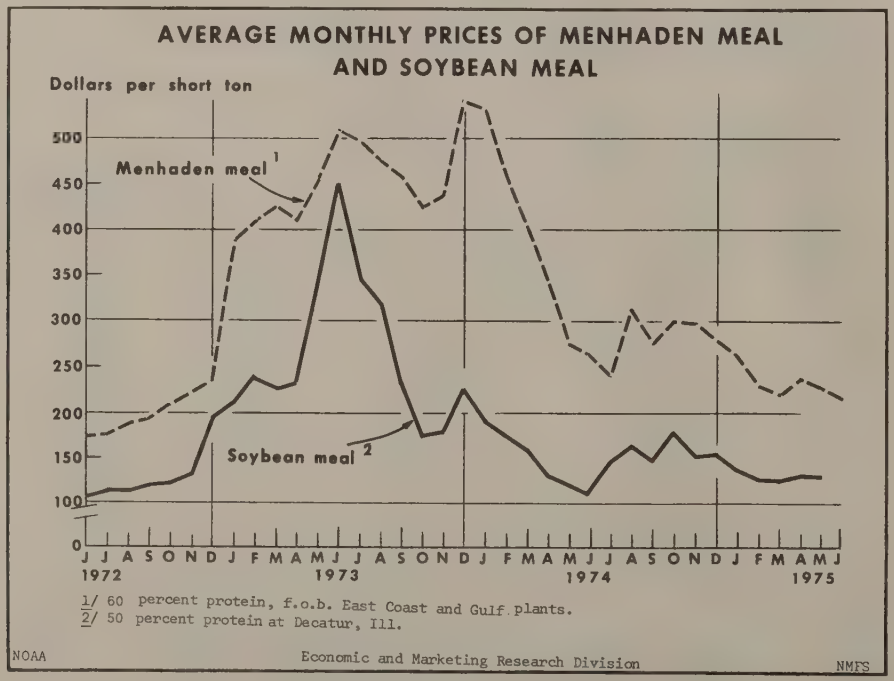

Figure 4

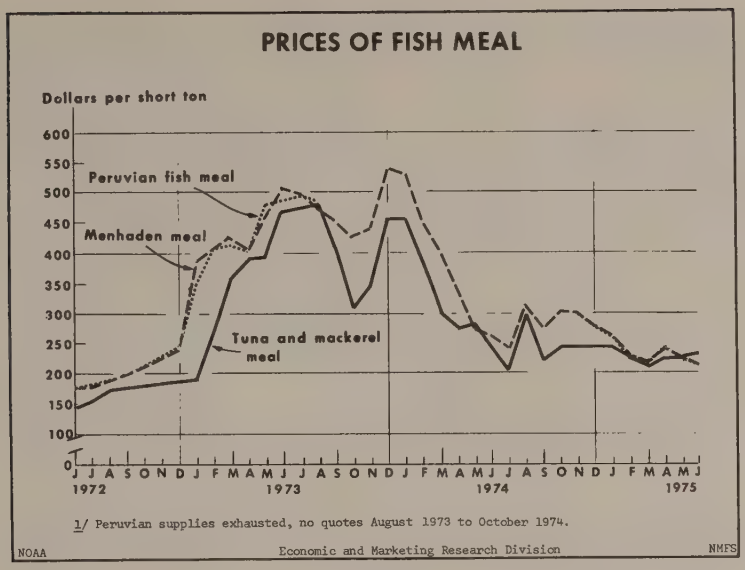

Figure 5

OUTLOOK

The outlook for fish meal is one of higher supplies and improved demand. Consequently the price developments are difficult to detail.

On the supply side, the recovery of Peruvian fish meal production tends to depress prices. However, Peruvian production is likely to remain considerably below normal (1967-71 average) in 1975. Experimental fishing was discontinued June 10 because of an excessive number of immature fish in the catch. Some experimental fishing will be conducted in July and August to evaluate the resource. Peruvian preliminary catch goal for the first part of the next fishing season, which normally begins in September, is about 2.5 million metric tons. This is the equivalent of about 500,000 tons of fish meal. Total Peruvian production for 1975 would then be an estimated 1.1 to 1.2 million metric tons compared with 900,000 tons in 1974 and an average of 1.8 million tons in 1967-71.

In addition to resource consideration, the future is clouded by high production costs. Substantial increases of fuel and labor costs are expected in Peru, mainly due to serious inflation. However, higher production costs are not likely to affect the Peruvian fish meal production in the short run.

We expect U.S. imports of fish meal to be considerably higher in 1975 than a year earlier, although general economic conditions and developments on the demand side will be the determining factors. The improving import situation is reflected in the recovery of Peruvian shipments to the West Coast. The first shipment of Peruvian meal of 6,000 metric tons to the West Coast, after a lapse of a couple of years, is expected to arrive in July. Peruvian meal is likely to continue to be shipped to this market area, as well as to the East and Gulf Coasts, providing that Peruvian production will continue as planned during the next fishing season.

The total production of fish meal in the United States in 1975 will likely be less than the 291,000 short tons produced in 1974. Although the menhaden fishing effort is higher this year than in 1974, the landings in June were still below a year ago, and the total January-June production of fish meal was about 13 percent down from 1974. Fish meal production ought to be about 9 percent above a year ago for the rest of the year in order to compensate the low production of the first half of the year.

An upturn in the general economy supports the possibility for increased demand for fish meal by feed formulators. If the improved profitability, now prevalent in the broiler industry, continues, broiler producers are likely to expand their output during the second half of 1975 relative to 1974. In addition, current prices of fish meal favor its utilization in feed formulas.

Recent Soviet grain purchases will not greatly influence prices of fish meal, because grains do not compete directly with high-protein feeds. However, a high level of exports of grains may keep prices of protein feeds firm for the rest of the year despite the surplus of soybeans.

FISH SOLUBLES

REVIEW

Supplies

Total domestic production of fish solubles in the first 5 months of 1975 was about the same as in 1974. Production was 25,604 short tons of fish solubles in January-June 1975.

Demand

Demand for fish solubles weakened between January-June 1975, as indicated by low prices during this period. Between June 1974 and June 1975 the price of solubles dropped 32 percent (fig. 6).

Prices of menhaden solubles declined slightly faster than the prices of menhaden meal. Prices of menhaden solubles (31 percent protein) averaged $86.25 per short ton in January whereas the price of menhaden meal (60 percent protein) was $263.12 in New York. By June, the price for solubles was $64.06 while menhaden meal dropped to $218.75. The price ratio, therefore, changed from 3.05 to 3.42. For users, menhaden solubles were a better purchase this year than in June 1974 when the price ratio was 2.77.

OUTLOOK

The recent drop in the price of fish solubles in comparison to fish meal has made the use of fish solubles increasingly attractive. The demand for fish solubles, therefore, is likely to strengthen in the second half of this year. Prices are expected to increase in response to higher demand.

Table 15.--U.S. production of fish solubles, by month, 1973-75

Month	1973	1974	1975
	- - -Thousand short tons - - -		
January	0.5	1.9	2.7
February	1.2	1.4	1.3
March	1.3	3.3	2.4
April	5.8	6.3	4.3
May	10.6	13.1	14.8
June	19.8	25.2	
July	25.8	27.9	
August	28.1	24.4	
September	18.3	12.0	
October	10.8	7.5	
November	8.3	9.2	
December	6.9	5.4	
Total 1/	137.4	137.3	

1/ Figures may not add to total because of rounding.
Data for 1975 are subject to revision.

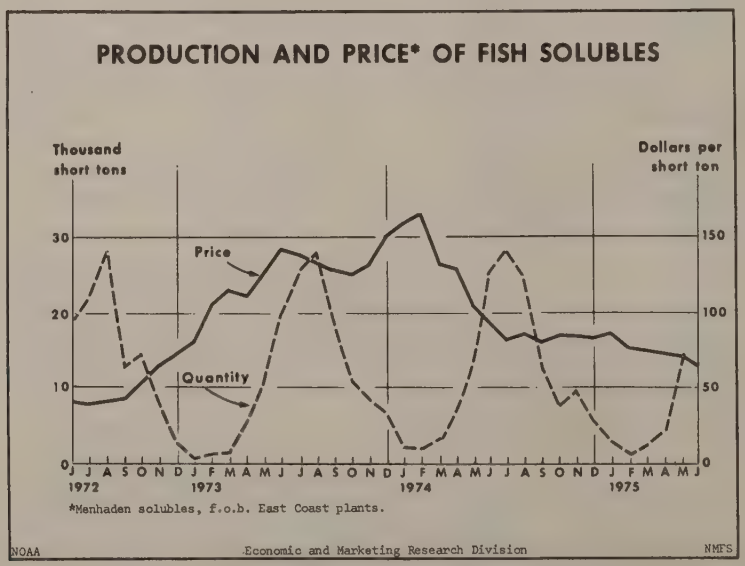

Figure 6

Table 16.--Average monthly price of menhaden solubles 1/, f.o.b. East Coast plants, 1973-75

Month	1973	1974	1975
	- - - -Dollars per short ton - - - -		
January	80.50	159.00	86.25
February	105.50	165.00	77.50
March	115.00	2/ 132.50	75.00
April	111.00	2/ 129.16	73.75
May	126.25	2/ 103.75	71.25
June	142.50	2/ 94.75	64.06
July	139.00	83.00	
August	133.75	86.25	
September	128.50	80.50	
October	2/ 125.00	85.00	
November	2/ 131.25	85.00	
December	2/ 150.00	84.00	
Average 3/	134.88	89.71	

1/ In tank cars; prices quoted by brokers at New York City.
2/ Asking price.
3/ Weighted average.

Table 17.--U.S. production of fish oil, by month, 1973-75

Month	1973	1974	1975
	- - - - Million pounds - - - -		
January	0.4	0.9	2.1
February	.4	.7	0.9
March	.6	.9	.9
April	4.7	7.0	4.3
May	18.1	30.1	36.6
June	37.2	46.9	
July	58.5	55.4	
August	50.9	54.1	
September	30.2	25.0	
October	15.3	7.3	
November	4.6	6.7	
December	3.7	3.2	
Total 1/	224.6	238.0	

1/ Figures may not add to total because of rounding.

Data for 1975 are subject to revision.

FISH OIL

REVIEW

Supplies

Fish Oil Production

The domestic fish reduction industry reported that 44.9 million pounds (20,347 metric tons) of fish oil were produced during January-May 1975 (table 17), up 13.2 percent from the same period last year and a 317-percent increase over the 1972-74 January-May average. The increase is attributed mainly to increased production of anchovy and menhaden oil. Reported production of anchovy oil was 2.58 million pounds(1,170 metric tons) during January-May 1975, up 336 percent from 1974. Menhaden oil extraction was 37.8 million pounds during the first 5 months of 1975 compared to 35.1 million pounds for the same period in 1974. For the first 5 months of 1975 84.3 percent of the total fish oil production extracted was from menhaden, 6.6 percent from tuna and mackerel, 5.8 percent from anchovy, and 3.3 percent from unclassified sources.

The increase in production of menhaden fish oil was primarily the result of high oil content in the menhaden harvested mainly off the Texas Coast.

Table 18.--Industrial use of fish oil in the United States, by month, 1973-75 1/

Month	1973	1974	2/1975
	- - - - Million pounds - - - -		
January	2.5	2.0	2.6
February	2.0	2.6	2.1
March	1.9	2.3	2.3
April	1.8	3.4	2.5
May	2.1	3.2	2.4
June	2.1	2.7	
July	2.4	2.8	
August	3.1	3.9	
September	1.8	3.3	
October	1.6	3.6	
November	2.0	2.7	
December	2.0	2.4	
Total 3/	25.3	34.9	

1/ Includes marine mammal oil other than sperm oil and some hydrogenated fat (vegetable and animal) and other fats and oils in process.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Demand

U.S. Use of Fish Oil

Consumption of industrial fish oil was 11.9 million pounds (5,414 metric tons) in the first 5 months of 1975 (table 18). Despite the 12.4-percent decrease in the Utilization of fish oil this year versus January-May 1974, demand for fish oil was up 3.5 percent in comparison with the average consumption for 1972-74. Apparently the present depressed economic situation has less negative effect on the market for fish oil than for substitute oils. During January-May 1975 the aggregate industrial consumption for castor, linseed, safflower, soybean, tall, and tung oil dropped 32.1 percent from 1974 and decreased by 33.7 percent from the 1972-74 average. For use as protective coatings 4/, those six oils are the main competitors of fish oil.

Export of Fish Oil

The January-May export market for fish oil, although improved with respect to the first 5 months of 1974, has not yet regained the same volume of pervious years. During the first 5 months of this year exports were 18 million pounds (8,158 metric tons) or 8.7 percent above 1974, but 30.5 percent below the 1972-74 January-May average.

4/ Fish oils, Their Chemistry, Technology, Stability, Nutritional Properties and Uses, M.E. Stansby, Editor, 1967. The AVI Publishing Co., Inc. Westport, Connecticut.

Table 19.--U.S. exports of fish oil 1/, by month, 1973-75

Month	1973	1974	2/ 1975
	- - - - Million pounds - - - -		
January	6.5	2.3	13.0
February	11.0	1.1	0.1
March	11.1	0.7	0.1
April	0.5	0.4	4.7
May	1.0	12.0	0.1
June	25.2	28.0	
July	6.4	53.5	
August	72.6	35.1	
September	26.2	4.8	
October	59.2	49.6	
November	17.5	2.8	
December	11.7	8.8	
Total 3/	248.8	199.1	

1/ Excluding whale oil.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Table 20.--Average monthly prices of menhaden oil 1/, f.o.b. East Coast plants, 1973-75

Month	1973	1974	1975
	- - - - Cents per pound - - -		
January	8.8	21.0	25.0
February	2/ 9.6	21.3	4/
March	2/10.3	23.7	4/
April	10.9	25.7	4/
May	11.7	4/ -	13.5
June	3/11.9	25.0	13.0
July	11.7	25.4	
August	3/11.5	26.0	
September	3/11.5	25.1	
October	4/ -	25.0	
November	4/ -	19.6	
December	4/ -	24.3	
Average 5/	11.6	25.4	

1/ Crude oil in tank cars; prices quoted by brokers at New York City.
2/ Nominal price.
3/ Asking price.
4/ Supplies exhausted, no quotes.
5/ Weighted average.

Table 21.--Average monthly price of tuna and mackerel oil 1/, at Los Angeles, 1973-75

Month	1973	1974	1975
	- - - - Cents per pound - - - -		
January	5.5	7.1	15.5
February	5.1	9.0	15.5
March	5.5	12.0	9.8
April	5.8	2/	4/ 7.2
May	6.3	11.0	4/ 7.4
June	6.7	11.0	4/ 7.5
July	6.7	12.3	
August	6.9	12.8	
September	7.0	13.0	
October	6.4	14.0	
November	6.5	15.3	
December	6.9	15.4	
Average 3/	6.5	12.3	

1/ Crude oil, f.o.b. plant; prices quoted by brokers at Los Angeles.
2/ Supplies exhausted, no quotes.
3/ Weighted average.
4/ Tuna only.

Price of Fish Oil

Prices have declined substantially in the first 5 months of 1975 after an almost threefold increase between January 1973 and August 1974 (table 20). The price of menhaden oil in particular is down. In January, menhaden oil prices were averaging 25 cents per pound ($551.6 per metric ton). By May 1975, the price was down to 13.5 cents per pound ($297.6 per metric ton) (fig. 7). The price of tuna/mackerel oil also dropped, from an average 15.5 cents per pound ($341.7 per metric ton) in January to 7.4 cents per pound ($163.1 per metric ton) in May. Increased supplies of fish oil in the world market appear to be the reason for reduced prices.

OUTLOOK

Because of the recent improvement in domestic yield, the production of fish oil this year is expected to increase over last year. We estimate that the fish oil extraction will be about 5 percent above last year production or about 250 million pounds.

Domestic use of fish oil however, is expected to be less than last year. Based on the first 4 months of utilization 1975 consumption of inedible fish oil is estimated to be about 32 million pounds--a decline of about 8 percent from 1974, but an increase of at least 11 percent above 1973.

The above factors, plus the increase availability of Peruvian and Norwegian fish oil and a reduced world market, will tend to decrease the price for fish oil slightly more before the end of the year. According to our estimates, total fish oil exports are expected to decline, perhaps by as much as 8 percent from last year.

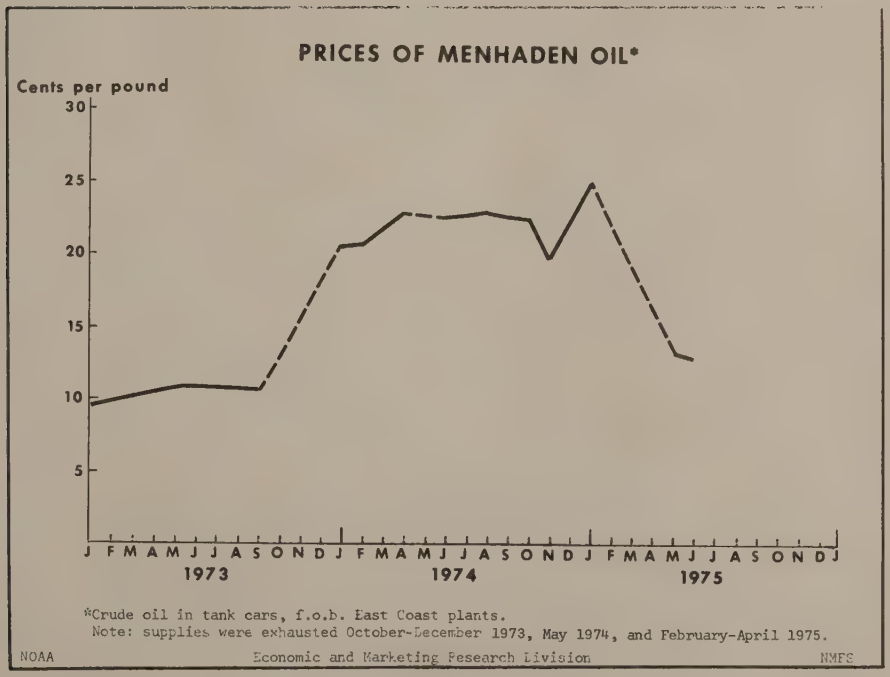
PRICES OF MENHADEN OIL*
Cents per pound
30
25
20
15
10
5
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J
1973
1974
1975
*Crude oil in tank cars, f.o.b. East Coast plants.
Note: supplies were exhausted October-December 1973, May 1974, and February-April 1975.
NOAA
Economic and Marketing Research Division
NMFS

Figure 7

*U.S. GOVERNMENT PRINTING OFFICE: 1975 210-960/1 1-3

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The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this department. Use of funds for printing this publication approved by the Office of Management and Budget, through June 30, 1978.

AMERICAN REVOLUTION BICENTENNIAL 1776-1976